1. (Previously Presented) A method of inspecting topographical features of the top layer of a structure, said method comprising:

surrounding said structure with a precursor metal gas;

directing an angled electron beam at said structure to create secondary electron beams as said angled electron beam strikes sidewalls of said topographical features, wherein said secondary electron beams break down said precursor metal gas to form a metal coating on said structure;

directing an ion beam at said structure to form a groove within said top layer of said structure; and

inspecting said topographical features exposed by said groove in said top layer of said structure.

2. (Original) The method in claim 1, wherein said process of directing said angled electron beam directs said electron beam at an angle sufficient to cause said electron beam to strike the sidewalls of said topographical features.

3. (Original) The method in claim 1, wherein said process of directing said angled electron beam comprises tilting a stage that supports said structure.

4. (Canceled).

5. (Previously Presented) The method in claim 1, wherein said secondary beams have less energy than said angled electron beam.

6. (Original) The method in claim 1, wherein said process of directing said angled electron beam comprises using an electron beam having an energy level of approximately between 100 and 10,000 electron volts.

7. (Original) The method in claim 1, wherein said process of directing said angled electron beam comprises directing said electron beam at an angle between approximately 20 and 70 degrees with respect to the surface of the top layer of said structure.

8. (Previously Presented) A method of inspecting topographical features of the top layer of a partially completed integrated circuit structure, said method comprising:

surrounding said partially completed integrated circuit structure with a precursor organic metal gas;

directing an angled electron beam at said partially completed integrated circuit structure to create secondary electron beams as said angled electron beam strikes sidewalls of said topographical features, wherein said secondary electron beams break down said precursor metal gas to form a metal coating on said partially completed integrated circuit structure;

directing an ion beam at said partially completed integrated circuit structure to form a groove within said top layer of said partially completed integrated circuit structure; and

inspecting cross sections of said topographical features exposed by said groove in said top layer of said partially completed integrated circuit structure.

9. (Original) The method in claim 8, wherein said process of directing said angled electron beam directs said electron beam at an angle sufficient to cause said electron beam to strike the sidewalls of said topographical features and prevent said electron beam from reaching the bottom of said topographical features.

10. (Original) The method in claim 8, wherein said process of directing said angled electron beam comprises tilting a stage that supports said partially completed integrated circuit structure.

11. (Canceled).

12. (Previously Presented) The method in claim 8, wherein said secondary beams have less energy than said angled electron beam.

13. (Original) The method in claim 8, wherein said process of directing said angled electron beam comprises using an electron beam having an energy level of approximately between 100 and 10,000 electron volts.

14. (Original) The method in claim 8, wherein said process of directing said angled electron beam comprises directing said electron beam at an angle between approximately 20 and 70 degrees with respect to the surface of the top layer of said partially completed integrated circuit structure.

15. (Original) A method of inspecting vias of the top layer of a partially completed integrated circuit structure, said method comprising:

surrounding said partially completed integrated circuit structure with a precursor organic metal gas;

directing an angled electron beam at said partially completed integrated circuit structure to create secondary electron beams as said angled electron beam strikes the sidewalls of said vias, wherein said secondary electron beams break down said precursor metal gas to form a metal coating on said partially completed integrated circuit structure;

directing an ion beam at said partially completed integrated circuit structure to form a groove within said top layer of said partially completed integrated circuit structure; and

inspecting cross sections of said vias exposed by said groove in said top layer of said partially completed integrated circuit structure.

16. (Original) The method in claim 15, wherein said process of directing said angled electron beam directs said electron beam at an angle sufficient to cause said electron beam to strike the sidewalls of said vias and prevent said electron beam from reaching the bottom of said vias.

17. (Original) The method in claim 15, wherein said process of directing said angled electron beam comprises tilting a stage that supports said partially integrated circuit structure.

18. (Original) The method in claim 17, wherein said secondary beams have less energy than said angled electron beam.

19. (Original) The method in claim 15, wherein said process of directing said angled electron beam comprises using an electron beam having an energy level of approximately between 100 and 10,000 electron volts.

20. (Original) The method in claim 15, wherein said process of directing said angled electron beam comprises directing said electron beam at an angle between approximately 20 and 70 degrees with respect to the surface of the top layer of said partially completed integrated circuit structure.